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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
09/342,235	06/29/99	TAKEMURA	Y	0756-1980ELE

MM91/0809

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EXAMINER	
SEFER, A	
ART UNIT	**PAPER NUMBER**
2826	

DATE MAILED: 08/09/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/342,235	TAKEMURA, YASUHIKO	
	Examiner	Art Unit	
	Ahmed N Sefer	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *6-8 and 10* is/are allowed.

6)☒ Claim(s) *1-5, 9, 11 and 12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9 and 11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9 and 11 recite the limitation "said voltage line" in line 5 of page 45 and 47. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tskjikawa et al. US Patent No. 5,051,570 in view Hamada et al. (EP 0 414 478 A1).

Tskjikawa et al disclose (see figs. 4 and 9, col. 6, lines 1-7 and lines 30-33 and col. 12, lines 30-40) a semiconductor device comprising a substrate or glass substrate 128 (as in claim 12) having an insulating surface; a blocking film 21 comprising silicon nitride (as in claim 12); at least first and second semiconductor islands 114, 115

comprising polycrystalline silicon (as in claims 5 and 12) formed over said substrate wherein each of the semiconductor islands has a channel region and a pair of impurity regions (unnumbered); an insulating film 141 or 200 nm thick insulating film (as in claim 2) formed over said substrate, said insulating film including at least first and second gate insulating films 134, 135 formed over said first and said second semiconductor islands, respectively; at least first and second gate electrodes 112, 113 comprising doped silicon and chromium (as in claim 3) formed over said first and second semiconductor islands with said first and second gate insulating films interposed therebetween; a wiring 118 formed on said insulating film wherein said wiring is connected to said one of the impurity regions through a hole (unnumbered) opened in said insulating film, an interlayer insulating film 123 formed over the first and second semiconductor islands, the first and second gate electrodes and wiring; and a pixel electrode 124 formed over said interlayer insulating film electrically connected to one of the pair of the impurity regions of the second semiconductor island, but do not specifically disclose a wiring for electrically connecting one of the impurity regions of the first semiconductor island with the second gate electrode. However, Hamada et al disclose in fig. 1 a wiring connecting a drain of TFT1 with the gate of TFT2. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to use a wiring connecting an impurity regions of one TFT with a gate electrode of another TFT, since that would enable one transistor to drive another transistor such that the data signal turns the other transistor ON thereby avoiding the formation of an extra scanning line.

As to claim 4, it would have an obvious design choice to make a pixel electrode using the same compound or ITO as that of a lower electrode 119, since that would save material and processing time.

Allowable Subject Matter

5. Claims 6-8 and 10 are allowed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Matsueda European reference discloses scanning lines connected to gate electrodes and extending across signal lines which are connected to source electrodes.

b. Dohjo et al US Patent No. 4,975,760 disclose an ITO pixel electrode.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ahmed N Sefer whose telephone number is (703) 605-1227.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on (703) 308-6601.

ANS
August 3, 2001

Nathan Flynn
Primary Examiner